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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/466,935	12/20/1999	VITALIY ARKADYEVICH LIVSHITS	0010-1070-0	1750

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EXAMINER

STEADMAN, DAVID J

ART UNIT	PAPER NUMBER
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1656

DATE MAILED: 12/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/466,935

Applicant(s)

LIVSHITS ET AL.

Examiner

David J. Steadman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 73-80 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 73-80 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Status of the Application***

- [1] Claims 73-80 are pending in the application.
- [2] Applicant's amendment to the claims, filed on 10/13/2005, is acknowledged. This listing of the claims replaces all prior versions and listings of the claims.
- [3] Applicant's arguments filed on 10/13/2005 have been fully considered and are deemed to be persuasive to overcome the rejections and/or objections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.
- [4] The indicated allowability of claims 73-80 is withdrawn in view of the newly discovered reference(s) to Homma et al. (*J. Biochem.* 94:2079-2081). Rejection(s) based on the newly cited reference(s) follow(s).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- [5] Claim(s) 73-76 are rejected under 35 U.S.C. 102(b) as being anticipated by Homma et al. (*supra*) as evidenced by Zakataeva et al. (*FEBS Lett* 452:228-232, cited

in the IDS filed on 3/31/2000). Claims 73-74 are drawn to an isolated bacterium transformed with a DNA encoding SEQ ID NO:4, including SEQ ID NO:3. Claims 75-76 are drawn to the isolated bacterium of claim 73 further transformed with a DNA encoding SEQ ID NO:2, including SEQ ID NO:1.

Homma et al. teaches an *E. coli* transformed with vector pKO1, which comprises a portion of *E. coli* genomic DNA including genes *pldA* and *pldB* (p. 2080, Figure 1).

Zakataeva et al. is cited as an evidentiary reference in accordance with MPEP 2131.01 as showing that a characteristic not disclosed in the reference of Homma et al. is inherent. Zakataeva et al. teaches that the *E. coli rhtB* and *rhtC* genes (corresponding to SEQ ID NO:1 and 3, respectively) fall between the *pldA* and *pldB* genes in the genome of *E. coli* (p. 229, Figure 1).

This anticipates claims 73-76 as written.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**[6]** Claim(s) 77-80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Homma et al. (*supra*) in view of Daum et al. (US Patent 3,830,696). Claims 77-80 are

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drawn to methods of producing an L-amino acid using the bacterium of claim 73, 74, 75, or 76.

Homma et al. discloses the teachings as described above.

Daum et al. teaches a method for preparing 5-hydroxy-L-tryptophan by "microbiologically hydroxylating" a substrate, e.g., D,L-tryptophan, by a microorganism, e.g., *E. coli*, and isolating the 5-hydroxy-L-tryptophan after culturing the microorganism (column 3 and claims 6 and 11). Daum et al. teaches "*Escherichia coli* strains are particularly preferred" in the method (column 3, lines 10-11).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to use the bacterium of Homma et al. to practice the method of Daum et al. One would have been motivated to do this because of the teaching of Daum et al. that "*Escherichia coli* strains are particularly preferred" as noted above. One would have a reasonable expectation of success for using the bacterium of Homma et al. to practice the method of Daum et al. because of the results of Homma et al. and Daum et al. Therefore, claims 77-80, drawn to methods as described above, would have been obvious to one of ordinary skill in the art at the time of the invention.

### **Conclusion**

[7] Status of the claims:

Claims 73-80 are pending.

Claims 73-80 are rejected.

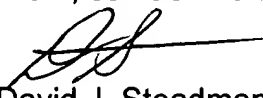
No claim is in condition for allowance.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Steadman whose telephone number is 571-272-0942. The examiner can normally be reached on Monday to Thursday and on alternate Fridays, 7:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleen Kerr can be reached at 571-272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David J. Steadman, Ph.D.  
Primary Examiner  
Art Unit 1656